DRAFT: ANNOTATED AGENDA FOR THE 21ST WORKING PARTY ON TROPICAL TUNAS

LAST UPDATED: 8 OCTOBER 2019

Date: 21 – 26 October 2019
Location: Donostia-San Sebastian, Spain
Venue: NH Arranzazu hotel
Time: 09:00 – 17:00 daily
Chair: Dr Gorka Merino (EU,Spain) **Vice-Chair**: Dr Shiham Adam (Maldives)

1. **OPENING OF THE MEETING** (Chair)

2. **ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION** (Chair)
   - IOTC–2019–WPTT21–01a Draft: Agenda of the 21st Working Party on Tropical Tunas
   - IOTC–2019–WPTT21–01b Draft: Annotated agenda of the 21st Working Party on Tropical Tunas
   - IOTC–2019–WPTT21–02 Draft: List of documents for the 21st Working Party on Tropical Tunas

3. **THE IOTC PROCESS: OUTCOMES, UPDATES AND PROGRESS**
   - 3.1 Outcomes of the 21st Session of the Scientific Committee (IOTC Secretariat)
     - IOTC–2019–WPTT21–03 Outcomes of the 21st Session of the Scientific Committee (IOTC Secretariat)
   - 3.2 Outcomes of the 23rd Session of the Commission (IOTC Secretariat)
     - IOTC–2019–WPTT21–03 Outcomes of the 21st Session of the Scientific Committee (IOTC Secretariat)
   - 3.3 Review of Conservation and Management Measures relevant to tropical tunas (IOTC Secretariat)
     - IOTC–2019–WPTT21–05 Review of Conservation and Management Measures relevant to tropical tuna (IOTC Secretariat)
   - 3.4 Progress on the recommendations of WPTT20 (IOTC Secretariat)
     - IOTC–2019–WPTT21–06 Progress made on the recommendations of WPTT20 (IOTC Secretariat)
   - 3.5 Outcomes of the 3rd Technical Committee on Management Procedures (TCMP03)
     - IOTC–2019–WPTT21–07 Outcomes of the 3rd Technical Committee on Management Procedures (IOTC Secretariat)

4. **NEW INFORMATION ON FISHERIES AND ASSOCIATED ENVIRONMENTAL DATA RELATING TO TROPICAL TUNAS**
   - 4.1 Review of the statistical data available for tropical tunas (IOTC Secretariat)
     - IOTC–2019–WPTT21–08 Review of the statistical data and fishery trends for tropical tunas (IOTC Secretariat)
   - 4.2 Review new information on fisheries and associated environmental data (general CPC papers)
     - IOTC-2019-WPTT21-10 Assessment of the species composition of major tropical tunas in purse seine catches: a new modelling approach for the Tropical Tuna Treatment processing (2). Application to the French fleet in the Indian Ocean. (Duparc A)
     - IOTC-2019-WPTT21-11 Statistics of the French Purse Seine Fishing Fleet Targeting Tropical Tunas in the Indian Ocean (1981-2018) (Floch L, Depetris M, Dewals P , Duparc A, Lebranchu J, Pernak M and Bach P)
     - IOTC-2019-WPTT21-12 Free school fishery trends for Spanish tropical purse seiners in the Indian Ocean (Báez J-C and Ramos M-L)
     - IOTC-2019-WPTT21-13 Assessing the misidentification rate for bigeye and yellowfin juveniles in brine sampled at Port Victoria (Indian Ocean) : consequences for the species composition estimates of

landings (Báez J-C, Bach P, Ruiz J, Manzaneque F, Pérez San Juan A, Pernak M, Salgado A, Duparc A, Lucas V, Lucas J and Ramos M-L)

- IOTC-2019-WPTT21-14 Statistics of the Seychelles purse seine targeting tropical tunas in the Indian Ocean (Assan C et al.)
- IOTC-2019-WPTT21-15 Status of Indian tropical tuna fisheries in 2018 (Mukesh, Varghese S, Pandey S, and Ramalingam L)
- IOTC-2019-WPTT21-16 Status of tropical tuna fisheries of Pakistan especially impact of subsurface gillnetting on their landings (M Moazzam)
- IOTC-2019-WPTT21-17 Tropical Tuna Landing at Fishing Ports in Thailand during 2016 – 2018 (Noranarttragoon P and Songphatkaew J)
- IOTC–2019–WPTT21–60 Catch Trends of Tropical Tunas by Malaysian Tuna Longliners in the Indian Ocean 2013 – 2017 (Jamaludin N-A, Jamon S, Abdullah E and Abu Halim N-H)
- IOTC-2019-WPTT21-18 Diet and consumption rates of yellowfin and skipjack tunas in the eastern Arabian Sea (Varghese S, Mukesh, Pandey S, and Ramalingam L)
- IOTC-2019-WPTT21-19 Analysis of catch and effort data of tropical tuna from purse seine and longline fishery in Mauritius (2014-2018) (Kawol D and Sooklall T)
- IOTC-2019-WPTT21-20 Standardization of bigeye and yellowfin tuna CPUE by Japanese longline in the Indian Ocean which includes cluster analysis (Matsumoto T et al.)
- IOTC-2019-WPTT21-21 Updated CPUE standardizations for bigeye and yellowfin tuna caught by Taiwanese longline fishery in the Indian Ocean. (Yeh Y-M, Tsai W-P, Hoyle S and Chang S-T)
- IOTC-2019-WPM10-16 Collaborative study of bigeye and yellowfin tuna CPUE from multiple Indian Ocean longline fleets in 2019, with consideration of discarding (Hoyle S et al.)
- IOTC-2019-WPTT21-22 Covariates of release mortality and tag loss in large-scale tuna tagging experiments (Hoyle S, Leroy B, Nicol S, Hampton J.)
- IOTC-2019-WPTT21-23 Using effort control measures to implement catch limits in IOTC purse seine fisheries (Sharma R and Herrera M)
- IOTC–2019–WPTT21–59 A Case for Fishery Closures to Manage Purse Seine Fisheries for Tropical Tunas in the IOTC Area of Competence (Herrera M)
- IOTC-2019-WPTT21-24 Outline of climate and oceanic conditions in the Indian Ocean: an update to mid-2019 (Marsac F)

5. BIGEYE TUNA – REVIEW OF NEW INFORMATION ON STOCK STATUS

5.1 Review of the statistical data available for bigeye tuna (IOTC Secretariat)

5.2 Review new information on bigeye tuna biology, ecology, stock structure, their fisheries and associated environmental data (CPC papers)

- IOTC-2019-WPTT21-26 Growth heterogeneity of Bigeye tuna in the Indian Ocean explored by the mixed effects model. (Ma Q, Wang X et al.)

5.3 Review of new information on the status of bigeye tuna (all)

- Nominal and standardised CPUE indices

- IOTC-2019-WPTT21-27 Analysis of size frequency and CPUE for Indian Ocean bigeye tuna (*Thunnus obesus*) based on the Chinese longline observer data (Wang Y, Zhu J and Dai X)
- IOTC-2019-WPTT21-29 CPUE standardization of bigeye and yellowfin tuna caught by Korean tuna longline fishery in the Indian Ocean (Lee S-I)
- IOTC-2019-WPTT21-30 Japanese longline CPUE for bigeye tuna in the Indian Ocean standardized by GLM (Matsumoto T)
- IOTC-2019-WPTT21-31 CPUE Standardization of Bigeye Tuna, *Thunnus obesus* (Lowe, 1839) from Indonesian Tuna Longline Fishery in Eastern Indian Ocean (Hartaty H, Setyadji B, Nishida T and Fahmi Z)

- Stock assessments

- IOTC–2019–WPTT21–61 Preliminary Indian Ocean Bigeye Tuna Stock Assessment 1950-2018 (Stock Synthesis). (Fu D).
- IOTC-2019-WPTT21-32 Preliminary stock assessment by JABBA for Bigeye tuna in the Indian Ocean (Ma Q et al.)
  - Selection of Stock Status indicators for bigeye tuna

5.4 Update on Management Strategy Evaluation Progress (OM formulation)

- IOTC-2019-WPM10-11 IOTC Bigeye and Yellowfin Management Procedure Evaluation update Oct2019 (Kolody D and Jumppanen)
- IOTC-2019-WPM10-08 Update on IOTC bigeye tuna MSE Operating Model Development October 2019 (Kolody D and Jumppanen)

5.5 Development of management advice for bigeye tuna (all)

5.6 Update of bigeye tuna Executive Summary for the consideration of the Scientific Committee (all)

6. SKIPJACK TUNA – REVIEW OF NEW INFORMATION ON STOCK STATUS

6.1 Review of the statistical data available for skipjack tuna (IOTC Secretariat)

6.2 Review new information on skipjack tuna biology, ecology, stock structure, their fisheries and associated environmental data (CPC papers)

- IOTC-2019-WPTT21-35 Iran's Skipjack Tuna fisheries (Akhondi M)

6.3 Review of new information on the status of skipjack tuna (all)

- Nominal and standardised CPUE indices
- IOTC-2019-WPTT21-37 Use of two data sets for the analysis of catch rates of Skipjack Tuna (*Katsuwonus pelamis*) in gillnet fishery of Sri Lanka (Haputhantri S)
- Stock assessments
- Selection of Stock Status indicators for skipjack tuna

6.4 Update on Management Strategy Evaluation Progress (OM formulation)

6.5 Development of management advice for skipjack tuna (all)

6.6 Update of skipjack tuna Executive Summary for the consideration of the Scientific Committee (all)

7. YELLOWFIN TUNA – REVIEW OF NEW INFORMATION ON STOCK STATUS

7.1 Review of the statistical data available for yellowfin tuna (IOTC Secretariat)

7.2 Review new information on yellowfin tuna biology, ecology, stock structure, their fisheries and associated environmental data (CPC papers)

- IOTC-2019-WPTT21-38 Identification of fishing activities and time allocation in the Maldives handline yellowfin tuna (*Thunnus albacares*) fishery (Ahusan M, Shimal M and Adam S)
- IOTC-2019-WPTT21-40 Genomic analysis reveals multiple mismatches between biological and management units in yellowfin tuna (*Thunnus albacares*) (Mullins R, McKeown N, Sauer W and Shaw P)
- IOTC-2019-WPTT21-41 Statistic of Yellowfin tuna caught by foreign vessels in Malagasy waters (2014 – 2018) (Razafimandimby Y, Jaona G and Joachim D)
- IOTC-2019-WPTT21-25 Pelagic longline fishing operation parameters optimization——A case study on targeting yellowfin tuna (*Thunnus albacares*) in the Indian Ocean (Song L)

7.3 Review of new information on the status of yellowfin tuna (all)

- Nominal and standardised CPUE indices
- IOTC-2019-WPTT21-42 Updated information on catch and effort of yellowfin tuna (*Thunnus albacares*) from Indonesian tuna longline fishery (Hartaty H, Setyadji B and Fahmi Z)
- IOTC-2019-WPTT21-44 Accounting for Fishing Days Without Set, Fishing Concentration and Piracy in the CPUE Standardisation of Yellowfin Tuna in Free Schools for the EU Purse Seine Fleet Operating in the Indian Ocean During the 1991-2017 Period (Guéry L, Kaplan D, Marsac F, Floch L, Báez J-C and Gaertner D)

- IOTC-2019-WPTT21-45 A Novel Index of Abundance of Juvenile Yellowfin Tuna in the Indian Ocean Derived from Echosounder Buoys (Santiago J, Uranga J, Quincoces I, Orue B, Grande M, Murua H, Merino G, Urtizberea A, Pascual P, Boyra G)
- IOTC-2019-WPTT21-46 Japanese longline CPUE for yellowfin tuna in the Indian Ocean standardized by generalized linear model. (Matsumoto T)
    - Stock assessments
- IOTC-2019-WPTT21-47 Evaluation of the potential impact of catch underreporting on yellowfin stock assessment using exploratory scenarios of catch history (Merino G, Fu D, Geehan J, Urtizberea A, Santiago J, Murua H)
- IOTC-2019-WPTT21-48 An Alternative Assessment for the Indian Ocean Yellowfin Tuna Stock; with Generic Goodness of Fit Diagnostics (Kell L and Sharma R)
- IOTC-2019-WPTT21-49 Stock assessment of Indian Ocean yellowfin using a biomass production model (Merino G, Urtizberea A)
- IOTC-2019-WPTT21-50 Preliminary Assessment of Indian Ocean Yellowfin Tuna 1950-2018 (Stock Synthesis, v3.30). (Urtizberea A, et al.)
- IOTC-2019-WPM10-25: Is Close-Kin Mark Recapture Feasible for IOTC yellowfin tuna stock assessment? (Kolody D and Bravington M)
    - Selection of Stock Status indicators for yellowfin tuna
- IOTC-2019-WPTT21-51 Application of a multivariate lognormal approach to estimate uncertainty about the stock status and future projections for Indian Ocean Yellowfin tuna (Winker H and Walter J)

7.4 Update on Management Strategy Evaluation Progress (OM formulation)

- IOTC-2019-WPM10-09 Update on IOTC yellowfin tuna MSE Operating Model Development October 2019 (Kolody D and Jumppanen)
- IOTC-2019-WPM10-19 Schedule of work for the development of management procedures for key species in the IOTC Area – Update (Australia)

7.5 Development of management advice for yellowfin tuna (all)

- IOTC-2019-WPM10-10 Proposal on a management procedure for yellowfin tuna in the IOTC Area of Competence (Various)

7.6 Update of yellowfin tuna Executive Summary for the consideration of the Scientific Committee (all)

8. FAD INFORMATION

- IOTC-2019-WPTT21-52 Results of the BIOFAD Project: Testing Designs and Identify Options to Mitigate Impacts of Drifting Fish Aggregating Devices on the Ecosystem (Zudaire I, Tolotti M, Murua J, Capello M, Andrés M, Cabezas O, Krug I, Grande M, Arregui I, Uranga J, Goñi N, Sabarros P, Ferarios J-M, Ruiz J, Baidai Y, Ramos M-L, Báez J-C, Abascal F, Moreno G, Santiago J, Dagorn L, Arrizabalaga H and Murua H)
- IOTC-2019-WPTT21-53 Methodology for the monitoring of FOB and buoy use by French and Italian tropical tuna purse seiners of the Indian Ocean (Maufroy A and Goujon M.)
- IOTC-2019-WPTT21-54 Towards the derivation of fisheries-independent abundance indices for tropical tuna: Report on biomass estimates obtained from a multi-frequency echosounder buoy model (M3I+). (Diallo A, Baidai Y, Mannocci . and Capello M.)
- IOTC-2019-WPTT21-55 Aggregation dynamics of tuna under drifting fish aggregating devices (DFADs) assessed through fisher's echosounder buoy in the Indian Ocean (Baidai Y, Dagorn L, Amande M, Gaertner D, and Capello M)
- IOTC-2019-WPTT21-56 Mapping tuna occurrence under drifting fish aggregating devices from fisher's echosounder buoys in the Indian Ocean. (Baidai Y, Dagorn L, Amande M, Gaertner D, and Capello M)

- IOTC-2019-WPTT21-58 Use of Anchored FADs in the Maldives – Notes for a Case Study for Assessing ALDFG (Riyaz A, Jauharee, Adam M S and Azheem M)

8.1 Outcomes of the 2nd joint tuna RFMO FAD Working Group meeting (IOTC Secretariat)

- IOTC-2019-WPTT21-INF02 Joint T-RFMO FAD Working Group 2nd Meeting report (Anon)

8.2 FAD category definitions and terminology

9. WPTT PROGRAM OF WORK

9.1 Revision of the WPTT Program of Work (2020–2024)

- IOTC–2019–WPTT21–09 Revision of the WPTT Program of Work (2020–2024) (IOTC Secretariat)

9.2 Development of priorities for an Invited Expert at the next WPTT meeting

10. OTHER BUSINESS

10.1 Date and place of the 22nd and 23rd Sessions of the WPTT (Chair and IOTC Secretariat)

10.2 Review of the draft, and adoption of the Report of the 21st Session of the WPTT (Chair)